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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,486	04/25/2001	Yasuo Iwasa	Q63961	4521
65565	7590	11/16/2009	EXAMINER	
SUGHRUE-265550			VO, HAI	
2100 PENNSYLVANIA AVE. NW			ART UNIT	
WASHINGTON, DC 20037-3213			PAPER NUMBER	
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			11/16/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/841,486	Applicant(s) IWASA ET AL.	
	Examiner Hai Vo	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11 and 13-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/23/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

REOPENING OF PROSECUTION

1. All of the art rejections have been withdrawn in view of the Board decision dated July 28, 2009. However, new grounds of rejections are made in view of newly discovered references to Iwasa et al. (US 6,811,837), Iwasa et al. (US 6,911,253), and Iida et al. (US 6,984,423).

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Group Director or designee has approved of reopening prosecution by signing below:

/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-11, and 18-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 0022033. Iwasa et al. (US 6,911,253) (hereafter Iwasa II). Iwasa II will be relied on as an equivalent form of WO 0022033. Iwasa II teaches a porous resin film comprising a resin composition similar to that of the porous resin film of the claimed invention, i.e., 38 wt% of polypropylene, 12 wt% of a hydrophilic thermoplastic resin and 50 wt % of an inorganic fine powder (example 1; table 1; and column 11, lines 20-35). The porous film has an average contact angle, a porosity within the claimed ranges (table 1). The hydrophilic thermoplastic resin is an alkylene oxide polymer (example 1). The alkylene oxide polymer is a reaction product of an alkylene oxide compound and a dicarboxylic acid compound. The inorganic

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fine powder has an average grain size of 0.1 to 10 microns (column 8, lines 14-15). The thermoplastic resin polymer is capable of dissolving in water or absorbing of 5 g/g or more of water in 30 mins (column 3, lines 64-67). A laminate in the form of a liquid absorber, an ink jet recording medium, includes a base layer having on at least one side thereof the porous film (column 10, lines 55-60). The porous film is a self-supporting stretched film (column 10, lines 40-60). A colorant fixing layer provided on at least one side of the porous film (column 12, lines 5-10). Iwasa II does not specifically disclose the porous resin film having a liquid absorbing capacity of 0.5 ml/m² and the number of pores present on the film surface. However, it appears that the porous film is made from the exact resin composition as the porous film of the instant invention. The resin composition comprises 38 wt% of polypropylene, 12 wt% of a hydrophilic thermoplastic resin and 50 wt % of an inorganic fine powder (example 1; table 1; and column 11, lines 20-35). The porous film has an average contact angle, a porosity within the claimed ranges (table 1). The hydrophilic thermoplastic resin is an alkylene oxide polymer (example 1). The alkylene oxide polymer is a reaction product of an alkylene oxide compound and a dicarboxylic acid compound. The inorganic fine powder has an average grain size of 0.1 to 10 microns (column 8, lines 14-15). The thermoplastic resin polymer is capable of dissolving in water or absorbing of 5 g/g or more of water in 30 mins (column 3, lines 64-67). A laminate in the form of a liquid absorber, an ink jet recording medium, includes a base layer having on at least one side thereof the porous film

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(column 10, lines 55-60). The porous film is a self-supporting stretched film (column 10, lines 40-60). A colorant fixing layer provided on at least one side of the porous film (column 12, lines 5-10). Therefore, it is the examiner's position that the liquid absorbing capacity and the number of pores on the film surface would be inherently present as like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties.

Iwasa II does not specifically disclose a screw shear rate of 300 sec^{-1} at which the composition was kneaded in an intermeshing twin-screw extruder. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the article of Iwasa II is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity (see discussion above). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is

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noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Iwasa II. Accordingly, Iwasa II anticipates or strongly suggests the claimed subject matter.

Note that submission of a certified translation of the foreign priority paper would make Iwasa II qualified as prior art under 35 U.S.C. 102(a). This rejection under 35 U.S.C. 102(a) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another".

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-6, 8-11, and 13-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,911,253 (Iwasa II). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of Iwasa II encompass the claimed subject matter (see discussion in paragraph 4 above).
7. Claims 1-6, 8-11 and 13-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. US 6,811,837 (hereafter Iwasa I) in view of US 6,911,253 (Iwasa II). The claims of Iwasa I teach each and every limitation of the claimed invention except the hydrophilic thermoplastic resin. Iwasa II, however, teaches a porous resin film comprising a resin composition similar to that of the porous resin film of the claimed invention, i.e., 38 wt% of polypropylene, 12 wt% of a hydrophilic thermoplastic resin and 50 wt % of an inorganic fine powder (example 1; table 1; and column 11, lines 20-35). The porous film has an average contact angle, a porosity within the claimed ranges (table 1). The hydrophilic thermoplastic resin is an alkylene oxide polymer (example 1). The alkylene oxide polymer is a reaction product of an alkylene oxide compound and a dicarboxylic acid compound. The inorganic fine powder has an average grain size of 0.1 to 10 microns (column 8, lines 14-15). The thermoplastic resin polymer is capable of

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dissolving in water or absorbing of 5 g/g or more of water in 30 mins (column 3, lines 64-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the hydrophilic thermoplastic polymer as taught by Iwasa II into the resin composition motivated by the desire to ensure a desirable ink absorption in the printing process and thus improving uniformity in the absorption.

8. Claims 1-6, 8-11, and 13-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,984,423. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '423 patent teach each and every limitation of the claimed subject matter except the number of pores on the surface of the porous film. However, it appears that the porous resin film of the '423 patent is structurally the same as the porous film of the instant invention. The porous film comprises from 30 to 90wt% of a thermoplastic resin and from 10 to 70 wt% of a fine inorganic powder. The thermoplastic resin is a blend of a polyolefin resin and a hydrophilic thermoplastic resin. The hydrophilic thermoplastic resin has a water absorption capacity within the claimed range. The porous film has a contact angle, porosity and liquid absorption capacity within the claimed ranges. The fine inorganic powder has an average particle size within the claimed range. The article includes a base layer and a colorant layer. Therefore, it is the examiner's position that the number of pores on the film surface would be inherently present as like material has like

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property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Iida does not specifically disclose a screw shear rate of 300 sec^{-1} at which the composition was kneaded in an intermeshing twin-screw extruder. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the article of Iida is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity (see discussion above). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Iida.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/
Primary Examiner, Art Unit 1794